



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

52

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,821	10/24/2000	Aamer Hydrie	MSI-653US	1854
22801	7590	03/28/2005	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			CHEN, SHIN HON	
			ART UNIT	PAPER NUMBER
			2131	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/695,821

Applicant(s)

HYDRIE ET AL.

Examiner

Shin-Hon Chen

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/10/04, 5/21/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-48 have been examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Jain et al. U.S. Pat. No. 6047325 (hereinafter Jain).

4. As per claim 1, Jain discloses a system comprising: a set of filters (Jain: column 2 lines 8-18); a mapping of virtual addresses to network addresses (Jain: column 1 line 65 – column 2 line 67); and a controller, coupled to the set of filters and the mapping, to, access, upon receipt of a data packet requested to be sent from a computing device to a target device via a network (Jain: column 1 line 65 – column 2 line 67), the set of filters and determine whether the data packet can be sent to the target device based on whether the computing device is allowed to communicate with the target device (Jain: column 1 line 65 – column 2 line 67), replace, based on the mapping, the target address in the data packet with a corresponding target network address (Jain: column 1 line 65 – column 2 line 67); and forward the data packet to the target device at the

Art Unit: 2131

target network address if it is determined the data packet can be sent to the target device (Jain: column 1 line 65 – column 2 line 67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Audebert U.S. Pat. No. 6694436 (hereinafter Audebert).

7. As per claim 2, Jain discloses a system as recited in claim 1. Jain does not explicitly disclose wherein the controller is further to prevent the computing device from modifying any of the filters in the set of filters. However, Audebert discloses prevent unauthorized modification to the filter program (Audebert: column 6 lines 46-61 and column 12 lines 5-16). It would have been obvious to one having ordinary skill in the art to prevent modification to the packet filters in a filter program. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Audebert within the system of Jain because it increases the security of packet filter by preventing modification to the program to bypass the filters.

Art Unit: 2131

8. As per claim 3, Jain discloses a system as recited in claim 1. Jain does not explicitly disclose wherein the computing device includes the system. However, Audebert discloses that limitation (Audebert: column 6 lines 46-61 and column 12 lines 5-16).

9. Claims 4, 39, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Boden et al. U.S. Pat. No. 6717949 (hereinafter Boden).

10. As per claim 4, 39, 44, and 45. Jain discloses a system as recited in claim 1. Jain does not explicitly disclose wherein the controller is to make the computing device aware of the virtual addresses in the mapping but to hide the network addresses in the mapping from the computing device. However, Boden discloses that limitation (Boden: column 1 line 26 – column 2 line 9). Using address translation and hide address to increase network security is well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Boden within the system of Jain.

11. Claims 5,6, 28-32, 34-36, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss et al. U.S. Pat. No. 6141749 (hereinafter Coss) and further in view of Dennis et al. U.S. Pat. No. 6466932 (hereinafter Dennis) or further in view of Epstein, III et al. U.S. Pat. No. 6684335 (hereinafter Epstein).

12. As per claim 5, Jain discloses a system as recited in claim 1. Jain does not explicitly disclose wherein the controller is further to allow the set of filters to be modified by a plurality of

Art Unit: 2131

remote devices operating at a plurality of different managerial levels. However, Coss discloses remote proxy or administrator loads filters (Coss: column 9 lines 7-18). It would have been obvious to one having ordinary skill in the art to combine the teachings of Coss within the system of Jain because it is well known in the art.

Jain as modified does not explicitly disclose plurality of remote devices operating at plurality of different managerial level. However, Dennis discloses that limitation (Dennis: abstract and column 9 lines 52-67). It would have been obvious to one having ordinary skill in the art to combine the teachings of Dennis within the combination of Jain-Coss because it increases security by using administrator at different layers. Alternatively, Epstein discloses that limitation as well (Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41). It would have been obvious to one having ordinary skill in the art to combine the teachings of Epstein within the combination of Jain-Coss because it increases security and prevents internal security breach by using multiple administrators.

13. As per claim 6, 28, 34, 35, and 36, Jain as modified discloses a system as recited in 5.

Jain as modified further discloses the system comprising allowing the set of filters to be modified by a lower managerial level remote device only if the modifications are not less restrictive than modifications imposed by a higher managerial level remote device (Dennis: abstract and column 9 lines 52-67; Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41).

14. As per claim 29, Jain as modified discloses a method as recited in claim 28. Jain as modified further discloses wherein the preventing comprises: receiving a request from the lower

Art Unit: 2131

managerial level device to modify the set of filters (Dennis: abstract and column 9 lines 52-67; Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41); determining whether the requested modification would result in, a violation of a filter previously added to the set of filters by the higher managerial device (Dennis: abstract and column 9 lines 52-67; Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41); and performing the requested modification if the requested modification would not result in a violation, and otherwise not performing the requested modification (Dennis: abstract and column 9 lines 52-67; Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41).

15. As per claim 30 and 37, Jain as modified discloses a method as recited in claims 29 and 35 respectively. Jain as modified further discloses wherein the requested modification comprises one or more of: adding a filter to the set of filters, modifying a filter in the set of filters, and deleting a filter from the set of filters (Coss: column 2 lines 30-43).

16. As per claim 31, Jain as modified discloses a method as recited in claim 28, wherein the violation occurs if the modification would result in a filter being less restrictive than the filter added by the higher managerial level device (Dennis: abstract and column 9 lines 52-67).

17. As per claim 32 and 38, Jain as modified discloses a method as recited in claims 28 and 35 respectively. Jain as modified further comprising preventing the computing device from modifying the set of filters. (Audebert: column 6 lines 46-61 and column 12 lines 5-16).

Art Unit: 2131

18. Claims 7, 9, 19, 20, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Audebert.

19. As per claim 7, 19, and 20, Jain discloses maintaining, at a computing device, a set of filters that restrict the ability of the computing device to communicate with other computing devices (Jain: column 1 line 65 – column 2 line 67). Jain does not explicitly disclose allowing the set of filters to be modified from a remote device and preventing the computing device from modifying the set of filters. However, Coss discloses that limitation (Coss: column 9 lines 7-18). It would have been obvious to one having ordinary skill in the art to combine the teachings of Coss within the system of Jain because it is well known in the art.

Jain as modified does not explicitly disclose preventing the computing device from modifying the set of filters. However, Audebert discloses that preventing unauthorized modification to filter software (Audebert: column 6 lines 46-61 and column 12 lines 5-16). It would have been obvious to one having ordinary skill in the art to prevent modification to the packet filters in a filter program. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Audebert within the combination of Jain-Coss because it increases the security of packet filter by preventing modification to the program to bypass the filters.

20. As per claim 9 and 22, Jain as modified discloses a method as recited in claims 7 and 20 respectively. Jain as modified further discloses wherein modification of the set of filters includes one or more of: adding a new filter to the set of filters, deleting a filter from the set of filters, and changing one or more parameters of a filter in the set of filters (Coss: column 2 lines 30-43).

21. As per claim 21, Jain as modified discloses a network mediator as recited in claim 20. wherein the controller is further to access, upon receipt of another data packet from another target device via the network, the set of filters and determine whether the data packet can be received at the computing device based on whether the computing device is allowed to receive communications from the other target device (Jain: column 1 line 65 – column 2 line 67).

22. As per claim 23 and 24, Jain as modified discloses a network mediator as recited in claim 20, wherein the network mediator is coupled to the computing device (Audebert: column 6 lines 46-61 and column 12 lines 5-16).

23. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Audebert and further in view of Boden et al. U.S. Pat. No. 6266707 (hereinafter Boden2).

24. As per claim 8, Jain as modified discloses a method as recited in claim 7. Jain as modified does not explicitly disclose wherein restriction of the ability of the computing device to communicate with other computing devices comprises restricting the computing device from transmitting data packets to one or more other computing devices. However, Boden2 discloses that limitation (Boden: column 1 lines 32-42). It is well known in the art to filter packets for incoming and outgoing packets. Therefore, it would have been obvious to one having ordinary

Art Unit: 2131

skill in the art to combine the teachings of Boden2 within the combination of Jain-Coss-Audebert.

25. As per claim 17, Jain as modified discloses a method as recited in claim 7. Jain as modified does not explicitly disclose wherein each filter includes a plurality of filter parameters, and wherein each of the plurality of filter parameters can include wildcard values. However, Boden2 discloses that limitation (Boden2: column 7 line 66 – column 8 line 22). It would have been obvious to one having ordinary skill in the art to combine the teachings of Boden2 within the combination of Jain-Coss-Audebert because packet filters are set by administrators based on different needs and requirements.

26. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Audebert and further in view of Mayes et al. U.S. Pat. No. 6510154 (hereinafter Mayes).

27. As per claim 10, Jain as modified discloses a method as recited in claim 7. Jain as modified does not explicitly disclose wherein one or more filters in the set of filters restrict one or more of the transmission of data packets of a particular type from the computing device and reception of data packets of a particular type at the computing device. However, Mayes discloses that limitation (Mayes: abstract and column 1 line 9 and column 2 line 32). It is well known in the art to filter packets based on their type. Therefore, it would have been obvious to one having

Art Unit: 2131

ordinary skill in the art to combine the teachings of Mayes within the combination of Jain-Coss-Audebert.

28. As per claim 11, Jain as modified discloses a method as recited in claim 7. Jain as modified further discloses wherein one or more filters in the set of filters restrict one or more of the transmission of Internet Protocol (IP) data packets from the computing device and reception of IP data packets at the computing device based on one or more of: a source address, a destination IP address, a source port, a destination port, and a protocol (Jain: column 2 lines 8-18 and abstract).

29. As per claim 12, Jain discloses a method as recited in claim 7, Jain further discloses wherein one or more filters in the set of filters identifies that a data packet targeting a particular address can be transmitted from the computing device to the addressed device, and further identifies a new address that the particular address from the data packet is to be changed to prior to being communicated to the addressed device (Jain: column 1 line 65 – column 2 line 18).

30. As per claim 13, Jain discloses a method as recited in claim 7. Jain as modified discloses wherein one of the filters in the set of filters is a permissive filter that indicates a data packet can be passed to its targeted destination device if the data packet parameters match corresponding parameters of the filter (Coss: column 1 lines 20-24).

Art Unit: 2131

31. As per claim 14, Jain as modified discloses a method as recited in claim 7. Jain as modified further discloses wherein one of the filters in the set of filters is an exclusionary filter that indicates a data packet cannot be passed to its targeted destination device if the data packet parameters match corresponding parameters of the filter (Coss: column 1 lines 20-24).

32. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Audebert and further in view of Dennis or further in view of Epstein.

33. As per claim 15, Jain as modified discloses a method as recited in claim 7. Jain as modified further discloses allowing comprises allowing the set of filters to be modified by a remote devices (Coss: column 9 lines 7-18). Jain as modified does not explicitly disclose plurality of remote computing devices operating at a plurality of different managerial levels. However, Dennis discloses that limitation (Dennis: abstract and column 9 lines 52-67). It would have been obvious to one having ordinary skill in the art to combine the teachings of Dennis within the combination of Jain-Coss-Audebert because it increases security by using administrator at different layers. Alternatively, Epstein discloses that limitation as well (Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41). It would have been obvious to one having ordinary skill in the art to combine the teachings of Epstein within the combination of Jain-Coss-Audebert because it increases security and prevents internal security breach by using multiple administrators.

Art Unit: 2131

34. As per claim 16, Jain as modified discloses a method as recited in 15. Jain as modified further discloses comprising allowing the set of filters to be modified by a lower managerial level remote device only if the modifications are not less restrictive than modifications imposed by a higher managerial level remote device (Dennis: abstract and column 9 lines 52-67; Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41).

35. Claims 18 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Audebert and further in view of Chopra et al. U.S. Pat. No. 6510509 (hereinafter Chopra).

36. As per claim 18 and 25, Jain as modified discloses a method as recited in claims 7 and 20 respectively. Jain as modified does not explicitly disclose wherein the set of filters restrict the ability of the computing device to communicate with other computing devices on a per-data packet basis, wherein each filter includes a plurality of filter parameters, and wherein each filter parameter includes a filter value and a mask value indicating which portions of the filter value must match a corresponding parameter in a data packet for the data packet to satisfy the filter. However, Chopra discloses that limitation (Chopra: column 4 lines 25-56). It is well known in the art to filter packets according to mask values. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Chopra within the combination of Jain-Coss-Audebert.

Art Unit: 2131

37. As per claim 26 and 27, Jain as modified discloses a network mediator as recited in claim 25. Jain as modified further discloses wherein the controller is to allow/prevent the data packet to be forwarded to the target device if the data packet satisfies the filter (Jain: column 1 line 65 – column 2 line 18 and abstract; Coss: column 1 lines 20-24).

38. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Coss and further in view of Audebert and further in view of Dennis or Epstein and further in view of Chopra.

39. As per claim 33, Jain as modified discloses a method as recited in claim 28. Jain as modified does not explicitly disclose wherein the set of filters restrict the ability of the computing device to communicate with other computing devices on a per-data packet basis, wherein each filter includes a plurality of filter parameters, and wherein each filter parameter includes a filter value and a mask value indicating which portions of the filter value must match a corresponding parameter in a data packet for the data packet to satisfy the filter. However, Chopra discloses that limitation (Chopra: column 4 lines 25-56). It is well known in the art to filter packets according to mask values. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Chopra within the combination of Jain-Coss-Audebert-Dennis-Epstein.

40. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Boden and further in view of Taylor et al. U.S. Pat. No. 6728885 (hereinafter Taylor).

Art Unit: 2131

41. As per claim 40 and 41, Jain as modified discloses a method as recited in claim 39. Jain as modified discloses address translation, which is well known in the art. Jain as modified does not explicitly disclose wherein the replacing comprises performing the replacing transparent to the computing device. However, Taylor discloses that limitation (Taylor: column 2 line 47 – column 3 line 9). It is well known in the art to address translation, which is transparent.

Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Taylor within the combination of Jain-Boden because it increase network security by prohibiting external network to view the actual address of a target device.

42. Claims 42 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Boden and further in view of Coss and further in view of Audebert.

43. As per claim 42 and 48, Jain as modified discloses a method as recited in claims 39 and 45 respectively. Jain as modified further discloses maintaining, at the computing device, a set of filters that further restrict the ability of the computing device to communicate with other computing devices (Jain: column 2 lines 8-18).

Jain as modified does not explicitly disclose allowing the set of filters to be modified from a remote device and preventing the computing device from modifying the set of filters. However, Coss discloses that limitation (Coss: column 9 lines 7-18). It would have been obvious to one having ordinary skill in the art to combine the teachings of Coss within the combination of Jain-Boden because it is well known in the art.

Art Unit: 2131

Jain as modified does not explicitly disclose preventing the computing device from modifying the set of filters. However, Audebert discloses that preventing unauthorized modification to filter software (Audebert: column 6 lines 46-61 and column 12 lines 5-16). It would have been obvious to one having ordinary skill in the art to prevent modification to the packet filters in a filter program. Therefore, it would have been obvious to one having ordinary skill in the art to combine the teachings of Audebert within the combination of Jain-Boden-Coss because it increases the security of packet filter by preventing modification to the program to bypass the filters.

44. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view Boden and further in view of Coss and further in view of Dennis or Epstein.

45. As per claim 43, Jain as modified discloses a method as recited in claim 39. Jain as modified further comprising: maintaining a set of filters that restrict the ability of the computing device to communicate with other computing devices (Jain: column 2 lines 8-18). Jain as modified does not explicitly disclose allowing multiple remote computing devices, each corresponding to a preventing a lower managerial level device from modifying the set of filters in a manner that would result in a violation of a filter added by a higher managerial level device. However, Coss discloses remote proxy or administrator loads filters (Coss: column 9 lines 7-18). It would have been obvious to one having ordinary skill in the art to combine the teachings of Coss within the combination of Jain-Boden because it is well known in the art.

Art Unit: 2131

Jain as modified does not explicitly disclose plurality of remote devices operating at plurality of different managerial level. However, Dennis discloses that limitation (Dennis: abstract and column 9 lines 52-67). It would have been obvious to one having ordinary skill in the art to combine the teachings of Dennis within the combination of Jain-Boden-Coss because it increases security by using administrator at different layers. Alternatively, Epstein discloses that limitation as well (Epstein: column 1 line 23 – column 2 line 50 and column 16 lines 27-41). It would have been obvious to one having ordinary skill in the art to combine the teachings of Epstein within the combination of Jain-Boden-Coss because it increases security and prevents internal security breach by using multiple administrators.

46. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain in view of Boden and further in view of Audebert.

47. As per claim 46 and 47, Jain as modified discloses a network mediator as recited in claim 45. Jain as modified does not explicitly discloses wherein the network mediator is communicatively coupled to the computing device. However, Audebert discloses that limitation (Audebert: column 6 lines 46-61 and column 12 lines 5-16). It would have been obvious to one having ordinary skill in the art to combine the teachings of Audebert within the combination of Jain-Boden because it is well known in the art to provide local filter software to prevent local computers from receiving malicious packets.

Response to Arguments

48. Applicant's arguments filed on 11/26/04 have been fully considered but they are not persuasive.

49. Regarding claim 1, applicant argues that the Jain reference is silent on "replace, based on mapping, the target address in the data packet with a corresponding target network address" and Jain reference only disclose "translation table" which not necessarily mean translating address. However, Jain specifically discloses address translation table (Jain: column 2 lines 7-8) and the address translation table is used to replace the target address with a corresponding target network address. Therefore, applicant's argument is respectfully traversed.

50. Also regarding claim 1, applicant argues that the reference does not disclose bi-directional filtering. However, the independent claim does not disclose bi-directional filtering. Therefore, the argument is moot.

51. Regarding claims 2 and 3, in response to applicant's argument that it is improper to combine the references where the references teach away from their combination, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Also, the Audebert reference is relied upon to disclose

Art Unit: 2131

protecting filter program from unauthorized modification, not the limitations that are not disclosed in the claims.

52. Regarding claims 4, 39, 44, and 45, applicant argues that the combination of Jain-Boden is improper because the proposed modification cannot render the prior art unsatisfactory for its intended purpose. Applicant also cited Jain reference (column 5 line 20 et seq.) to indicate that additional security may be provided by binding machines to both the MAC and IP addresses and having filters that check both the MAC and IP address of a source of a message. However, the portion of the Jain reference cited by applicant is directed to filtering function not the address translation function and one with ordinary skill in the art would understand that address translation is to hide internal network address. Therefore, the Boden reference is relied upon is explicitly pointing out the importance of the address translation function and applicant's argument is respectfully traversed.

53. Regarding claims 5, 6, 28-32, 34-36, and 38, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the method of using hierarchical

Art Unit: 2131

management to restrict authority to perform tasks can be applied to different network functions not restricted to firewall and filter functions.

54. Regarding claims 7, 9, and 19-24, In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one having ordinary skill in the art at the time of applicant's to protect the filtering software from being modified by the computing device regardless of what the environment the filter program is engaged in so that security can be maintained.

55. Regarding claims 8 and 17, applicant argues that Boden2 does not explicitly disclose each of the plurality of filter parameter can include wildcard values. However, Boden2 discloses that some of the filter parameters allows the special value to be specified as long as it's necessary. Therefore, as long as the wildcard value is not strictly required for the filter parameter, there is no significant difference between some of the filter parameters allows the special value to be specified and each of the filter parameter can include wildcard values.

Art Unit: 2131

56. Regarding claims 10-14, applicant argues that Mayes reference does not explicitly disclose block outbound packets. However, the limitations of claims 10-14 do not emphasize the limitation of bi-directional communication.

57. Regarding claims 15 and 16, same rationale is applied as above in response to claims 5, 6, 28-32, 34-36, and 38.

58. Regarding claims 18 and 25-27, applicant argues that the Chopra reference is silent on outgoing packets. However, the claim language does not explicitly disclose bi-directional communication.

59. Regarding claim 33, argument regarding claim 33 has been answered in the above related issues.

60. Regarding claims 40 and 41, applicant argues that the Taylor reference does not replace one piece of information with another. However, applicant admitted that the Taylor reference discloses the transparency function replaces the IP address of a host on the internal protected network with its own IP address for all traffic passing through, which replaces the address.

Taylor reference also discloses transparently hiding the address of internal host.

61. Regarding claims 42 and 48, argument regarding claims 42 and 48 has been answered in preceding paragraphs.

62. Regarding claim 43, argument regarding claims 43 has been answered in preceding paragraphs.

63. Regarding claim 46 and 47, applicant argues that Audebert does not disclose network mediator which is communicatively coupled to the computing device. However, the filtering device is communicatively coupled to the terminal.

Conclusion

64. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

65. Wesinger, Jr. et al. U.S. Pat. No. 6804783 discloses firewall providing enhanced network security and user transparency.

66. Salo et al. U.S. Pat. No. 6609148 discloses client remote access to enterprise networks employing enterprise gateway servers in a centralized data center converting plurality of data requests for messaging and collaboration into a single request.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2131

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen

Application/Control Number: 09/695,821

Page 23

Art Unit: 2131

Examiner

Art Unit 2131

SC


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100